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IN THE CLAIMS

1-9. (Canceled)

10. (Previously presented) A high frequency power amplifier module comprising:

- an input terminal;
- an output terminal;
- a control terminal;
- a mode switching terminal;
- a semiconductor amplification element including a first gate and a second gate between a drain and a source, said first gate being closer to said drain for receiving the signal from said control terminal, and said second gate being closer to said source for receiving the signal from said input terminal;
- a circuit for supplying said output terminal with a signal responding to the signal outputted from the drain of said semiconductor amplification element;
- a bias circuit coupled with said control terminal for supplying the second gate of said semiconductor amplification element with a bias responding to a control voltage supplied to said control terminal; and

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a mode switching circuit operated in response to the signal from said mode switching terminal to supply an output signal to the second gate of said semiconductor amplification element.

11. (Previously presented) A high frequency power amplifier module according to Claim 10,

wherein said circuit disposed between said semiconductor amplification element and said output circuit includes one or more cascade-coupled second semiconductor amplification elements, and

wherein said second semiconductor amplification element includes: a control terminal coupled with the output terminal of the upstream stage semiconductor amplification element; and a first terminal coupled with either said output terminal or the downstream stage semiconductor amplification element.

12. (Previously presented) A high frequency power amplifier module according to Claim 11, further comprising:

an AGC (auto gain control) circuit for supplying its output to the first gate of said semiconductor amplification element.

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13. (Previously presented) A high frequency power amplifier module according to Claim 10,

wherein said high frequency power amplifier module is an amplifier system for the GSM (global system for mobile communication), when the output signal of said mode switching circuit exhibits a first state, and an amplifier system for the EDGE (enhanced data rates for GSM evolution) when the output signal of said mode switching circuit exhibits a second state.

14. (Previously presented) A high frequency power amplifier module comprising:

- an input terminal;
- an output terminal;
- a control terminal;
- a mode switching terminal;

a semiconductor amplification element including a first gate and a second gate between a drain and a source, said first gate being closer to said drain for receiving the signal from said control terminal, and said second gate being closer to said source for receiving the signal from said input terminal;

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a circuit for supplying said output terminal with a signal responding to the signal outputted from the drain of said semiconductor amplification element;

a bias circuit coupled with said control terminal for supplying the first gate and the second gate of said semiconductor amplification element with a bias responding to a control voltage supplied to said control terminal; and

a mode switching circuit operated in response to the signal from said mode switching terminal to supply an output signal to the second gate of said semiconductor amplification element.

15. (Previously presented) A high frequency power amplifier module according to Claim 14,

wherein said high frequency power amplifier module is an amplifier system for the GSM (global system for mobile communication), when the output signal of said mode switching circuit exhibits a first state, and an amplifier system for the EDGE (enhanced data rates for GSM evolution) when the output signal of said mode switching circuit exhibits a second state.

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25. (Previously presented) A wireless communication system comprising a high frequency power amplifier module at the output stage on a transmission side,

wherein said high frequency power amplifier module includes:

an input terminal;

an output terminal;

a control terminal;

a mode switching terminal;

a semiconductor amplification element including a first gate and a second gate between a drain and a source, said first gate being closer to said drain for receiving the signal from said control terminal, and said second gate being closer to said source for receiving the signal from said input terminal;

a circuit for supplying said output terminal with a signal responding to the signal outputted from the drain of said semiconductor amplification element;

a bias circuit coupled with said control terminal for supplying the second gate of said semiconductor amplification element with a bias responding to a control voltage supplied to said control terminal; and

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a mode switching circuit operated in response to the signal from said mode switching terminal to supply an output signal to the second gate of said semiconductor amplification element.

26. (Previously presented) A wireless communication system according to Claim 25,

wherein said circuit disposed between said semiconductor amplification element and said output circuit includes one or more cascade-coupled second semiconductor amplification elements, and

wherein said second semiconductor amplification element includes: a control terminal coupled with the output terminal of the upstream stage semiconductor amplification element; and a first terminal coupled with either said output terminal or the downstream stage semiconductor amplification element.

27. (Previously presented) A wireless communication system according to Claim 26, further comprising:

an AGC (auto gain control) circuit for supplying its output to the first gate of said semiconductor amplification element.

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28. (Previously presented) A wireless communication system according to Claim 25,

wherein said high frequency power amplifier module acts as an amplification module for the GSM (global system for mobile communication), when the output signal of said mode switching circuit exhibits a first state, and an amplification module for the EDGE (enhanced data rates for GSM evolution) when the output signal of said mode switching circuit exhibits a second state.

29. (Previously presented) A wireless communication system comprising a high frequency power amplifier module at the output stage on a transmission side,

wherein said high frequency power amplifier module includes:

an input terminal;

an output terminal;

a control terminal;

a mode switching terminal;

a semiconductor amplification element including a first gate and a second gate between a drain and a source, said first gate being closer to said drain for receiving the

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signal from said control terminal, and said second gate being closer to said source for receiving the signal from said input terminal;

a circuit for supplying said output terminal with a signal responding to the signal outputted from the drain of said semiconductor amplification element;

a bias circuit coupled with said control terminal for supplying the first gate and the second gate of said semiconductor amplification element with a bias responding to a control voltage supplied to said control terminal; and

a mode switching circuit operated in response to the signal from said mode switching terminal to supply an output signal to the second gate of said semiconductor amplification element.

30. (Previously presented) A wireless communication system according to Claim 29,

wherein said high frequency power amplifier module acts as an amplification module for the GSM (global system for mobile communication), when the output signal of said mode switching circuit exhibits a first state, and an amplification module for the EDGE (enhanced data rates for GSM evolution)



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when the output signal of said mode switching circuit exhibits a second state.

31. (Previously presented) A high frequency power amplifier module comprising:

an input terminal adapted to be supplied with a signal to be amplified;

an output terminal;

a control terminal;

a mode switching terminal;

a semiconductor element including: a source; a drain for outputting a signal to be transmitted to said output terminal; a first gate being disposed closer to said drain; and a second gate disposed closer to said source and adapted to be supplied with the signal from said input terminal; and

a control circuit for receiving a signal from said control terminal and a signal from said mode switching terminal to supply a bias voltage to said first gate and said second gate.

32. (Original) A high frequency power amplifier module according to Claim 31,

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wherein in response to the signal from said mode switching terminal, said control circuit generates the bias voltage so that said semiconductor element may act in a linear region or in a non-linear action region.

33. (Original) A high frequency power amplifier module according to Claim 32,

wherein said semiconductor element is a dual gate FET.

34. (Previously presented) A wireless communication system comprising:

an antenna; and

a high frequency power amplifier module for supplying its output to said antenna,

wherein said high frequency power amplifier module includes:

an input terminal adapted to be supplied with a signal to be amplified;

an output terminal;

a control terminal;

a mode switching terminal;

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a semiconductor element including: a source; a drain for outputting a signal to be transmitted to said output terminal; a first gate being disposed closer to said drain; and a second gate disposed closer to said source and adapted to be supplied with the signal from said input terminal; and a control circuit for receiving a signal from said control terminal and a signal from said mode switching terminal to supply a bias voltage to said first gate and said second gate.

35. (Original) A wireless communication system according to Claim 34,

wherein in response to the signal from said mode switching terminal, said control circuit generates the bias voltage so that said semiconductor element may act in a linear action region or in a non-linear action region.

36. (Original) A wireless communication system according to Claim 35,

wherein said semiconductor element is a dual gate FET.

37. (New) A high frequency power amplifier module

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comprising:

an input terminal for receiving a high frequency signal to be amplified;

an output terminal;

a control terminal for receiving a power control signal;

a mode switching terminal for receiving a mode signal;

a first semiconductor amplification element including a first gate and a second gate between a drain and a source, said first gate being closer to said drain for receiving the power control signal from said control terminal, and said second gate being closer to said source for receiving the high frequency signal from said input terminal; and

a controlled bias circuit, responsive to the power control signal at the control terminal and responsive to the mode signal at the mode switching terminal, including a semiconductor element coupled with the first semiconductor amplification element and a mode switching element,

wherein the mode switching element of the controlled bias circuit is in a low conductive state in response to a first level of the mode signal so that the semiconductor element is maintained at a relative high bias condition and the first semiconductor amplification element is maintained at a relative low bias condition related to the power control

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signal at the control terminal, and

wherein the mode switching element of the controlled bias circuit is in a high conducive state in response to a second level of the mode signal so that the semiconductor element is maintained at a relative low bias condition and the first semiconductor amplification element is maintained at a relative high bias condition related to the power control signal at the control terminal.

38. (New) A high frequency power amplifier module according to claim 37,

wherein the controlled bias circuit further includes a first resistor, a second resistor, a third resistor, a fourth resistor, and a fifth resistor,

wherein the semiconductor element has a third gate and a fourth gate between a drain and a source, said third gate being closer to said drain, said fourth gate being closer to said source, and

wherein the first resistor is coupled between the control terminal and the drain of the semiconductor element, the second resistor is coupled between the drain of the semiconductor element and the fourth gate, the third resistor is coupled between the second gate and the drain of the

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semiconductor element, the fourth resistor is coupled between the mode switching terminal and the mode switching element, and the fifth resistor is coupled between the control terminal and the third gate.

39. (New) A high frequency power amplifier module according to claim 38,

wherein the semiconductor element is turned off and the first semiconductor amplification element performs in a non-linear action region when the output signal of the mode switching circuit is a high conductive state, and

wherein the semiconductor element is turned on and the first semiconductor amplification element performs in a linear action region when the output signal of the mode switching circuit low conductive state.

40. (New) A high frequency power amplifier module according to claim 39,

wherein said high frequency power amplifier module is an amplifier system for the GSM(Global System for Mobile communication) when the mode switching element is in the high conductive state, and an amplifier system for the EDGE(Enhanced Data rates for GSM Evolution) when the mode switching circuit

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is the low conducive state.

41. (New) A high frequency power amplifier module according to claim 39,

wherein the first semiconductor amplification element and the semiconductor element are dual gate field effect transistors.

42. (New) A high frequency power amplifier module according to Claim 39, further including one or more cascade-coupled second semiconductor amplification elements,

wherein said second semiconductor amplification elements are arranged between said first semiconductor amplification element and an output circuit.